Total Force
Human Capital Winning Formula

What will historians say?

Navy Service Training Command
Accession Training Research
and
Best Practices Symposium

23-25 AUG 2005
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Lincolnshire, Ill.

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The Wall Street Journal announced today America's Human Capital Economy boast all time gains in the DOW, S&P 500, and NASDAQ.

World leaders continue to marvel at America’s ability to meet shifting global economic demands while retaining the highest quality of Human Capital workers.

Economist and financial analysts credit the “Bullish” economy to the creation of the Human Capital Stock Exchange. An exchange where human capital worker capability, capacity, and demonstrated competencies contribute substantially to America’s leading Gross National Product (GNP) status.

What will historians say about TF-HCS contribution to America's Human Capital Economy?

The way we were. *circa* 2003

20 years ago industry, education and government initiated efforts to deal with worker skill anemia, shrinking skill worker pools (regional clusters) outward migration of skilled workers to international communities, college graduates were perfectly prepared for a world that did not exist, industry was forced to expense remedial training, traditional career pathways became a blur, something called the Human Capital economy was in early formation, and all the moving piece parts were not in alignment.

Further, concerned congressional and military thought leaders considered the skill and education landscape a serious threat to national security.

National Economic Council reports America workers are losing their value in the global Human Capital Economy

Someone had to Take Charge

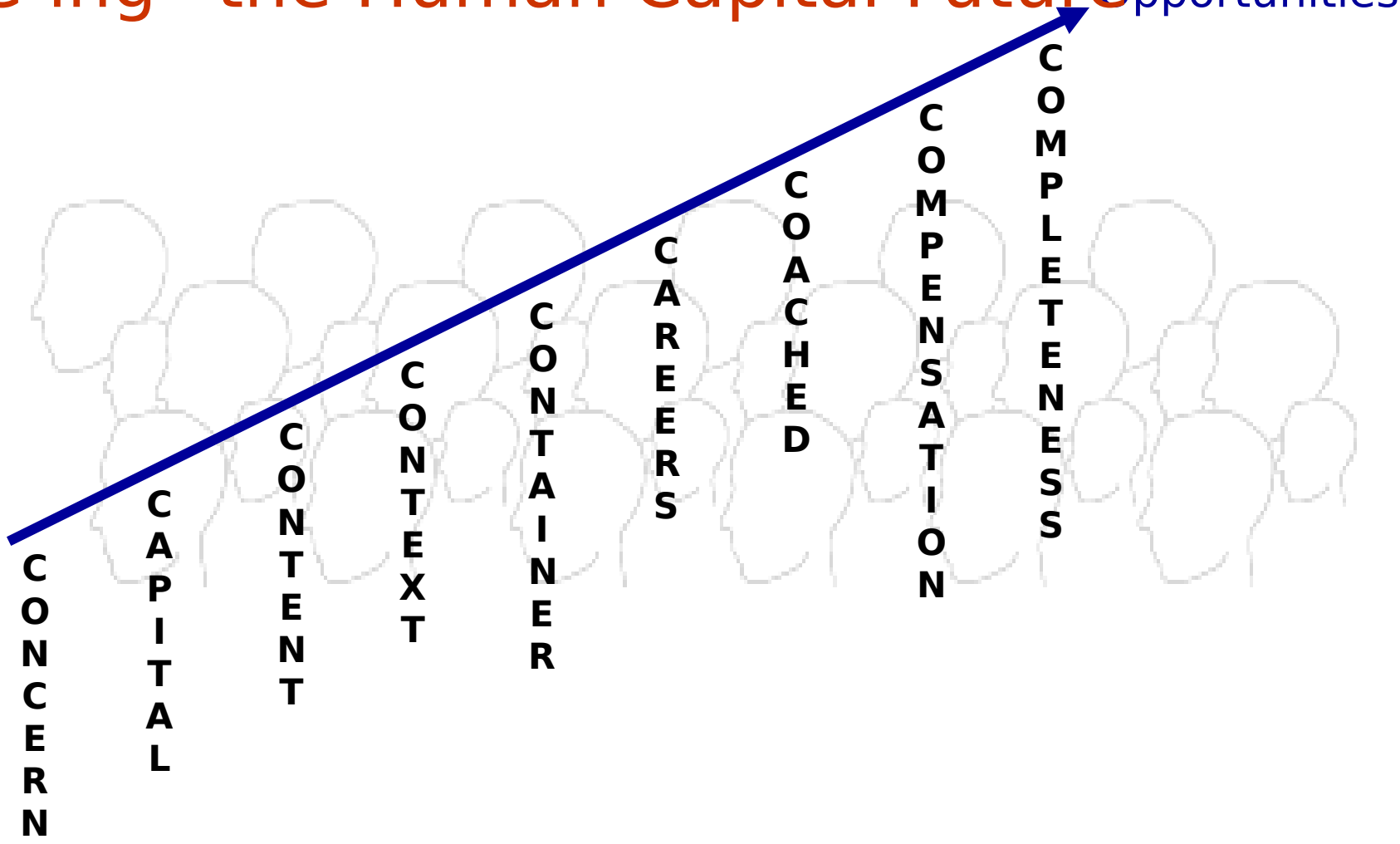
What will historians say?

Navy, OSD and Congressional leaders reversed the trend.

- Leveraged converging socio-economical and human focused satisfaction phenomenon.
- Created interdisciplinary thought leader teams to design end-state.
- Reorganized business lines to produce products in a lean and agile production environment.
- Designed new job/career structures to meet production performance c
- Aligned training/education/business support systems to job/career str
- Designed a sophisticated self-managed opportunity management system.
- First to socialize Human Capital Economy model which was adopted by the DoD family.
- Environment was both nutritious and delicious to the Total Focus members.

Total Force Human Capital Strategy Empha

“C-ing” the Human Capital Future



Total Force Human Capital Cultural Change

Legacy		Sea Warrior
Manpower is free	→	Best use of Manpower
Billets define requirements	→	Requirements = capability
Slam to Fill	→	Motivate to fill
Activity duty solutions	→	Human Capital Objects
Fixed incentives	→	Prescriptive incentives
Acquisition cost	→	Total Ownership Cost
Rate-Rating-NEC	→	Job Family-Job-Positions
Occupational Task Standards	→	SkillObject Standards
Learning by Course (LO's)	→	My Learning Event

Total Force Human Capital Winning Formula

Sample Future End State

Recruiting

Street to Fleet Supply Chain Management

Training/
Education/
Experience

Fleet

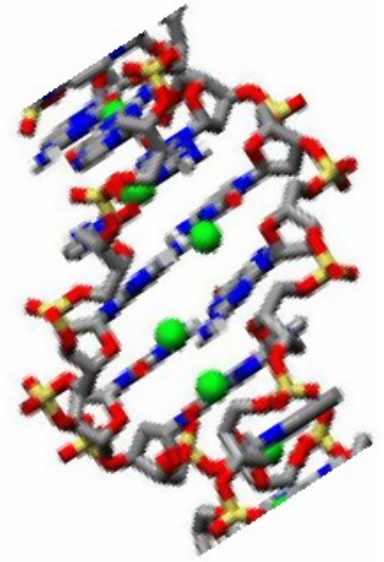
Prospective Candidate ^{1}C has Interest ^{1}I and proven academic/work competencies ^{1}AWC that predict Career Opportunities ^{1+n}CO in Information and Finance Job Families JF.

Sailor S^{1} is a Recruit ^{1}R at Basic Training ^{1}BT and has Learning Achievement ^{1}LA that verifies advancement to Apprentice Status ^{1}AS for Basic Information Technician Job J.

Sailor S^{1} is an apprentice ^{1}L with pay band ^{4}PB serving in Basic Information Technician Job ^{1}J and is In Route ^{1}IR to journeyman ^{1}L Job ^{1}J at CVN 21 ^{1}CT and is required to perform SkillObjects ^{1+n}SO to meet fleet performance requirements FPR

Sailor S^{1} has completed Learning Event ^{1}LE from course C^{1} of curricula X^{1} as of Date D^{1} and needs to complete Learning Events LE^{1} from course C^{2} of curricula X2 before Date D^{2} to achieve Terminal Learning Objective TLO^{1}

Essential Human Capital Content Elemen



Human Capital Objects

Competencies

SkillObjects™

"The Currency of Work"

Review some essential components

A closer look at Human Capital Content foundational elements and role to Integrated Learning Environment End-to-End Concept Model.

Human Capital Content Statements

Success Statement:

Central to Total Force Human Capital Strategy and Sea Warrior (MPT&E) success is a shift from a "*task/equipment-centric*" to a "*SkillObject/Competency*" operation environment.

Problem Statement:

The emerging warfighting/peacekeeping environment demands descriptors of work, worker and workplace to be standardized and usable across the all workforce development functions *(manpower, training, education, recruiting, NTA capability, etc.)*

The "**AS-IS**" workforce development environment is transitioning to the **"TO-BE"** while the tail (descriptors and framework) are in a blended Rate/Rating/NEC and Job Family, Job, Critical Work Function, Competency, SkillObject and work context format.

The blend of **AS-IS** and **TO-BE** workforce descriptors presents significant challenges to the recruiting, placement, training content design, delivery, and measurement practioners.

Solution Strategy:

Provide Human Capital practioners a clear & simple process to align current content to blended descriptions (Task/KSA) with eye on future content (KSA).

Strategy should assure all activities are forward compatible realizing there will be multiple spirals required to meet desired end-state.

SkillObjects™ and Work Element Descript

1. A SkillObject™ is a measurable, detailed description of an occupational skill people perform in accomplishing work. A SkillObject™ consists of the logically clustered unique knowledge, skills, abilities, tools, tasks (2-10), resources (KSATTR's) and performance standards that are performed, trained, or evaluated together in a job and are required to successfully perform the job. The SkillObject™ has Context work elements (context identifier, specialty KSA's, sub-tasks, procedures, etc.) where applicable.

2. SkillObjects™ are the lowest unit of analysis to define work.

3. SkillObject™ KSA's are <u>enablers</u> and not <u>measures</u> of performance.

4. Context work elements: position-specific

SkillObject™ Use Case

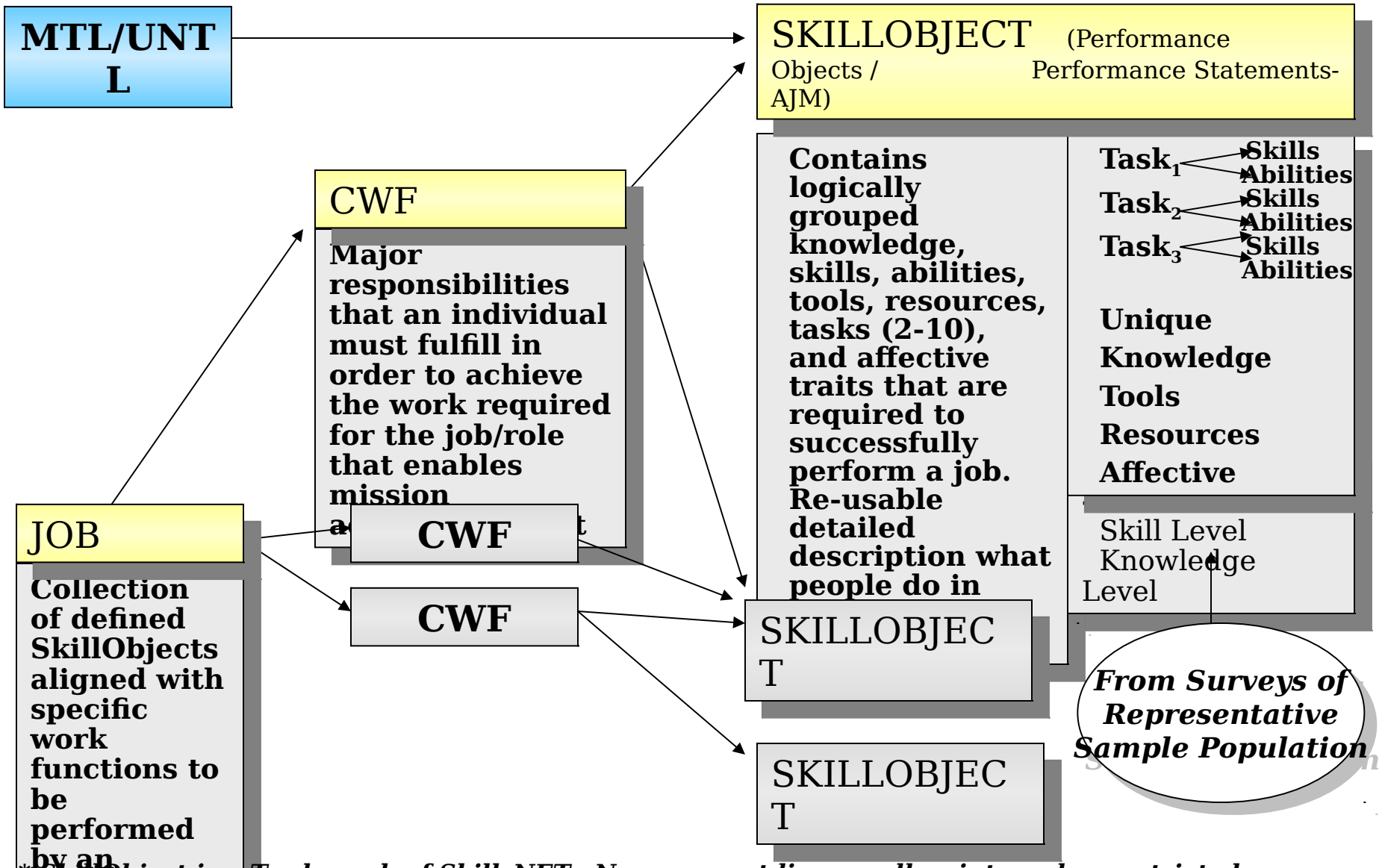
The sample use case is based on the Job Family "**Radar Operations**", job title "**Air Traffic Controller**", and position title "**Carrier Air Traffic Control Center (CATCC) Approach Controller**" SkillObject™ data with "**SPN-43 Approach Radar**" as Context.

Based on the job analysis, there are 43 SkillObjects™ in the Air Traffic Controller job. They are listed below. Of the 43 SkillObjects™, 28 have relevance to the position of Carrier Air Traffic Control Center (CATCC) Approach Controller.

Air Traffic Control Supervision
Air Traffic Control Supervision - Sea
Air Traffic Control Supervision - Shore
Airspace Coordination Procedures
Clearance Procedures
Emergency Control Procedures
Emergency Procedures
Equipment Management
Equipment Operations
Flight Planning Supervision
General Procedures
General Procedures - Sea
General Procedures - Shore
General Procedures - Tower
General Procedures Flight Planning - Shore
Inter-Facility Coordination Procedures
Intra-Facility Coordination Procedures
Media Management
Message Handling
Non-Control Coordination Procedures
Non-Control Tactical (Expeditionary)
Non-Radar Procedures
Program Management
Program Management - Sea
Program Management - Shore
Publication Management
Radar Procedures
Radar Procedures-Sea
Radar Procedures-Shore
Routine Administration
Routine Transmissions
Safety Alerts and Advisory Procedures
Separation Procedures
Special Handling Procedures
Special Use Airspace
Status Board Operations
Tactical (Expeditionary) Procedures
Taxi and Ground Movement Procedures
Tower Supervision
Training
Wake Turbulence Tower Procedures
Wake Turbulence Procedures
Weather Reporting

Radar Procedures-Sea SkillObject™ will be used to illustrate job and context c

SkillObject Level I Architecture


MTL/UNTL
SKILLOBJECT (Performance Objects / Performance Statements-AJM)
CWF
Major responsibilities that an individual must fulfill in order to achieve the work required for the job/role that enables mission
JOB
Collection of defined SkillObjects aligned with specific work functions to be performed by an individual
CWF
CWF
Contains logically grouped knowledge, skills, abilities, tools, resources, tasks (2-10), and affective traits that are required to successfully perform a job. Re-usable detailed description what people do in
Task1 Skills Abilities
Task2 Skills Abilities
Task3 Skills Abilities
Unique
Knowledge
Tools
Resources
Affective
Skill Level Knowledge Level
SKILLOBJECT
SKILLOBJECT
From Surveys of Representative Sample Population

*SkillObject is a Trademark of SkillsNET—Navy current license allow internal unrestricted,

SkillObject Level I Use Case

MTL/UNTL

NTA 5.6

CWF

Maintain Safety of Aircraft Within Area of Responsibility

Coordinate Aircraft Handling with Other Air Control Centers

JOB

Air Traffic Controller

SKILLOBJECT

Radar Procedures-Sea

The Primary Enabling Skill and Ability and normative survey data are only shown on the first task in order to conserve space. All tasks have these elements related to them.

Tasks:

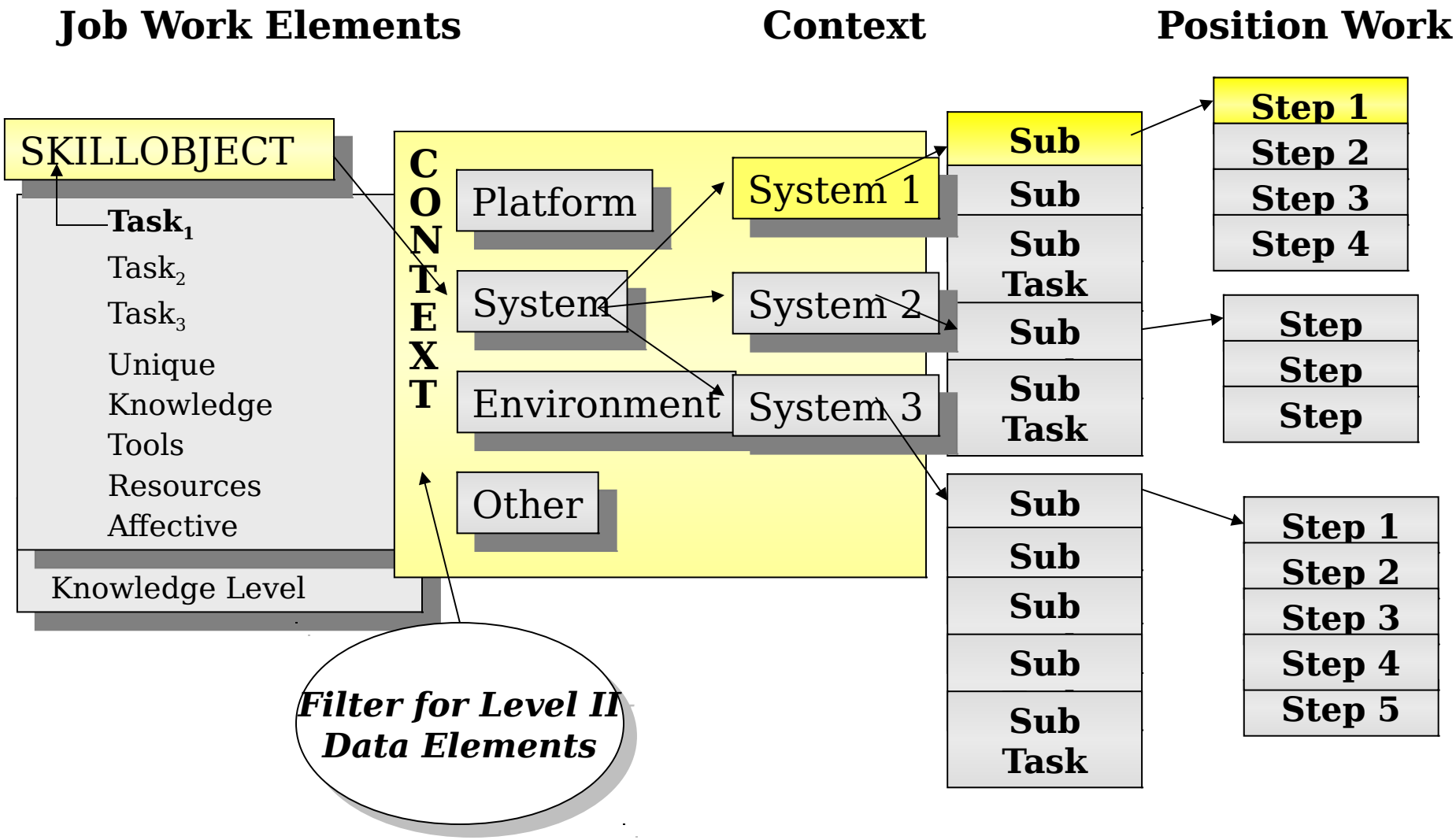
- Control Instrument Controlled Landing System approaches
  - **Task Primary Skill** - Operation and Control
  - **Task Primary Ability** - Deductive Reasoning
  - **Mean Task Frequency Rating:** 4.21
  - **Mean Task Criticality Rating:** 3.84
  - **Percentage Population Performing:** 82%
- Conduct air traffic control radar final surveillance approaches
- Control aircraft using Precision Approach Landing Systems (PALS)
- Control Precision Approach Radar (PAR) approaches
- Operate air traffic control equipment
- Perform air traffic control aircraft emergency procedures
- Perform approach procedures
- Perform facility flight check procedures

Unique Knowledge:

- Air Traffic Control Communications Procedures
- Air Traffic Control Hazard Reporting

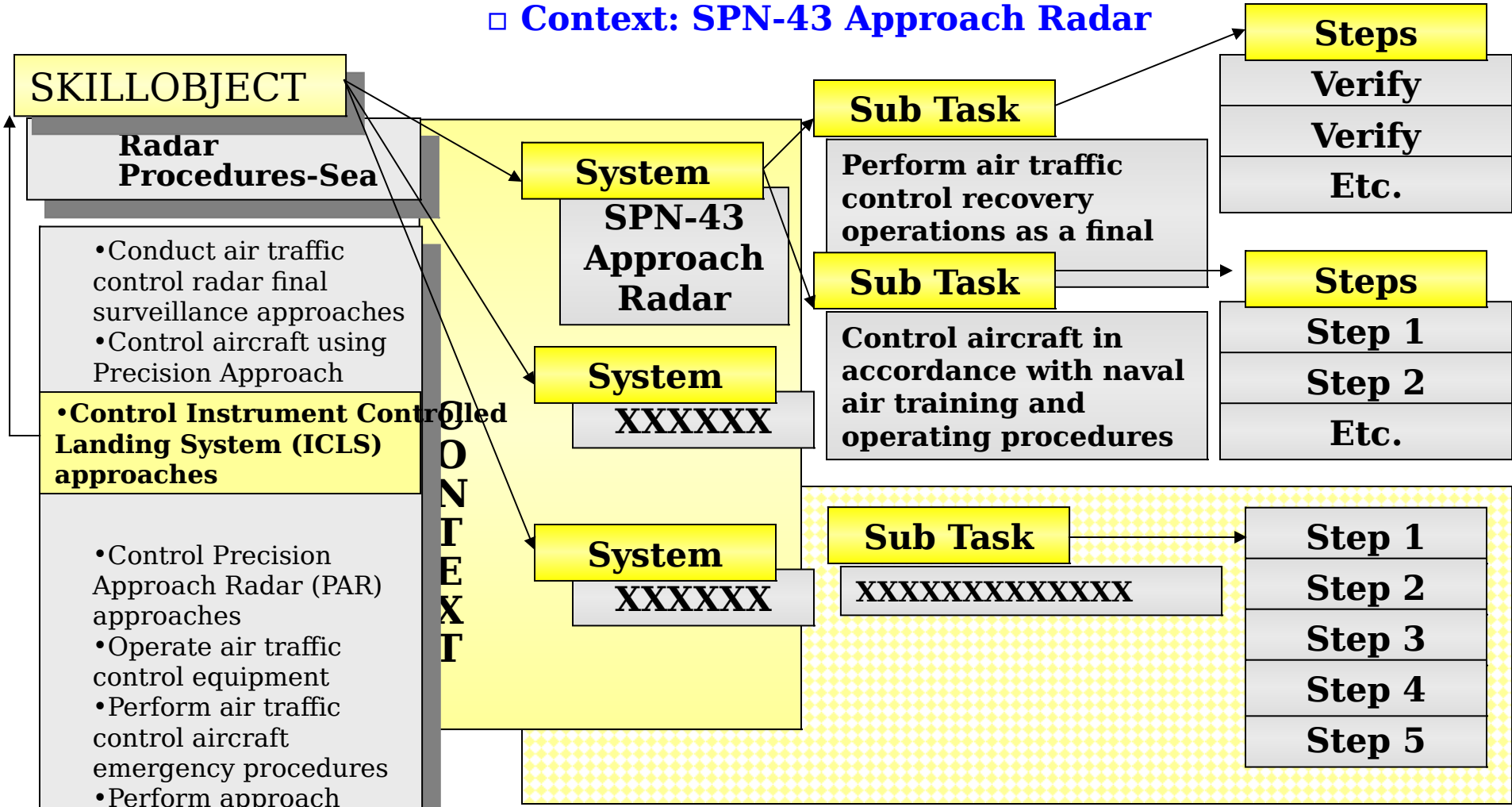
Not all Tasks, Tools, Unique Knowledge or Resources are shown due to space limitations.

SkillObject Context Level II Architecture



SkillObject Context Level II Use Case Data

- **Job Family: Radar Operations**
  - **Job: Air Traffic Controller**
    - **Position: CATCC Approach Controller**
      - **Context: SPN-43 Approach Radar**



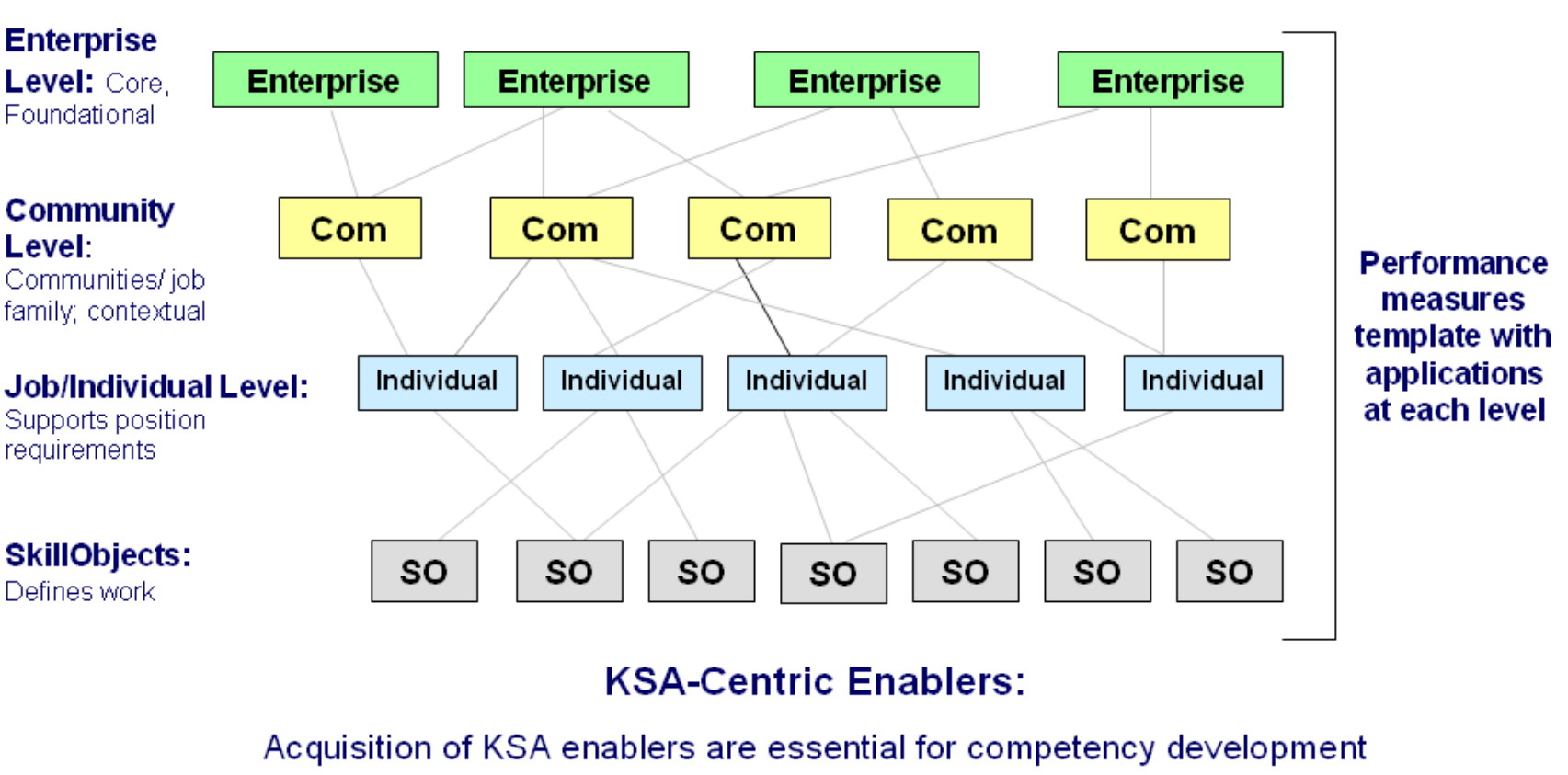
Essential Human Capital Content Elemer

Total Force Human Capital Strategy

Competency Model

Essential Human Capital Content Element

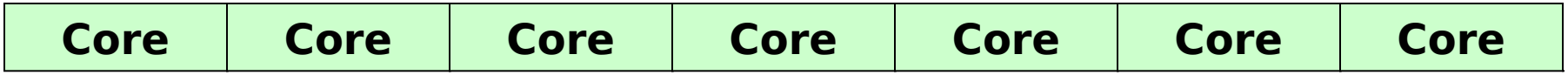
Competency Architecture



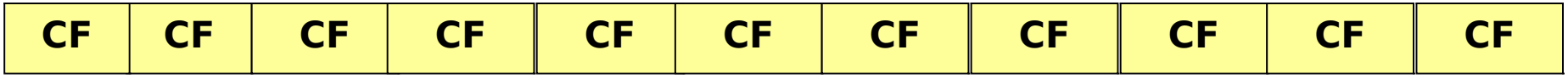
Core, Cross-Functional and Specialty Domains

Essential Human Capital Content Element

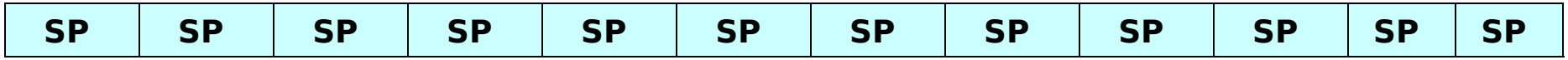
Competency Architecture



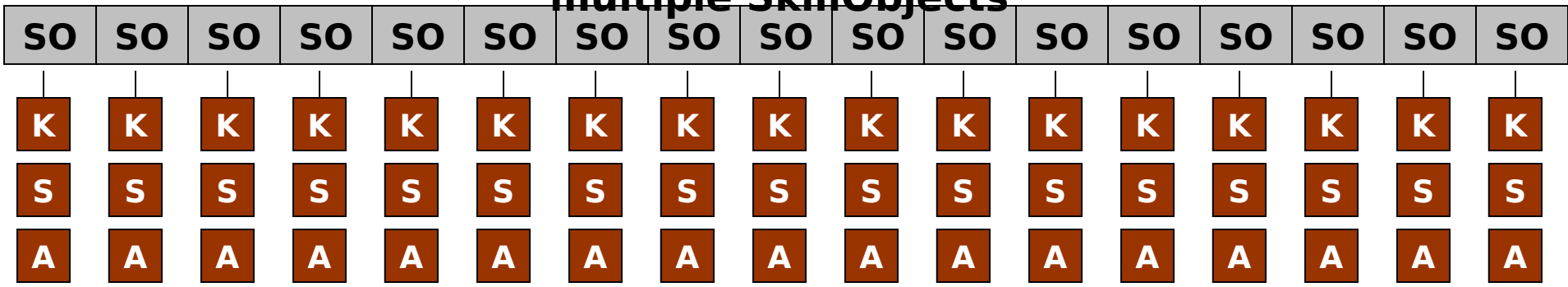
Most closely lined to mission, Core relates to many Cross-Functional, without a direct relationship



Cross-Functional are broader than Specialty, enabling community crosswalks

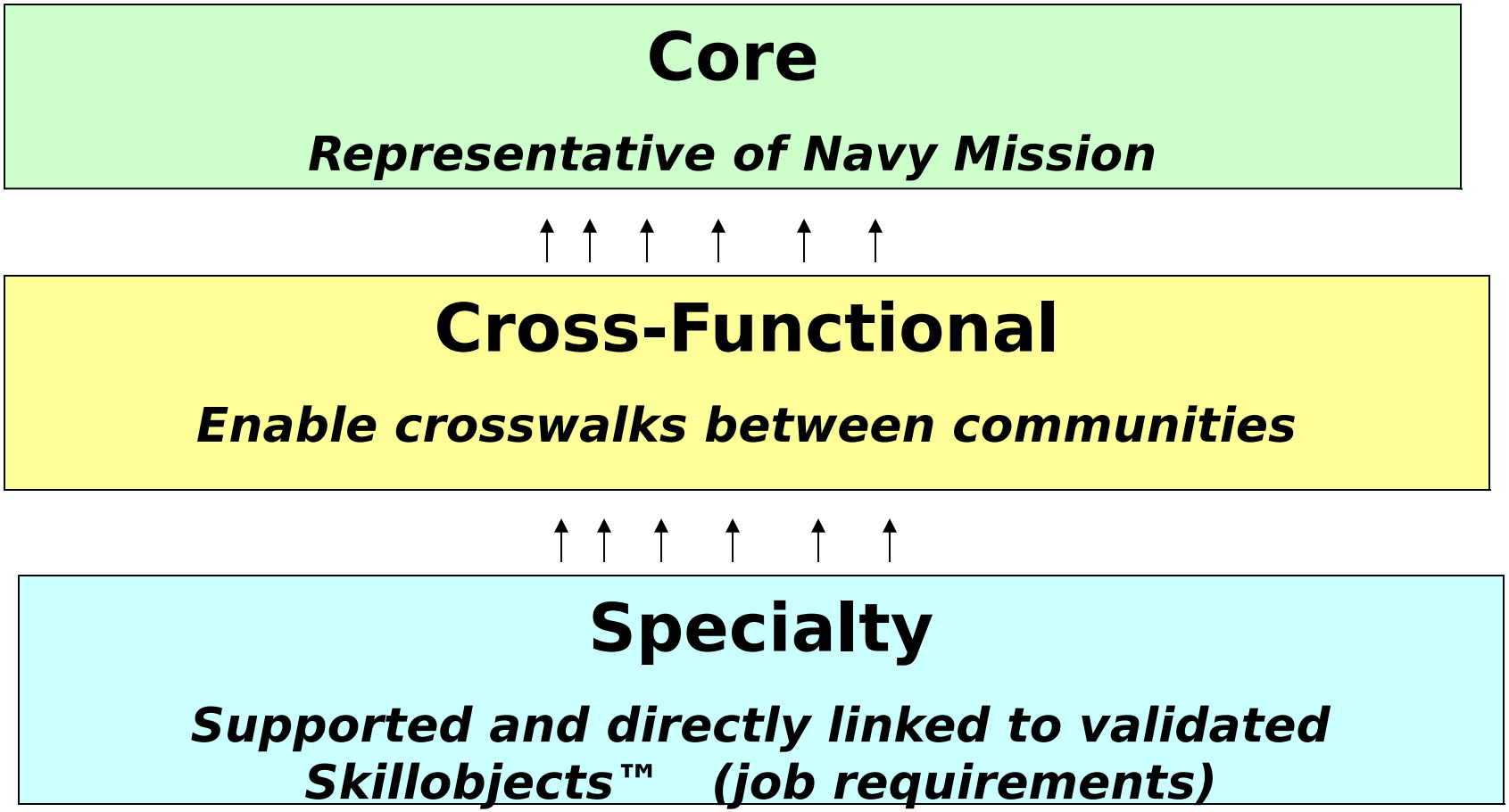


Specific in nature, the Specialty competencies link closely to multiple SkillObjects



Essential Human Capital Content Element

Competency Architecture



Competency – SkillObject Connection

Job: Imagery Screener

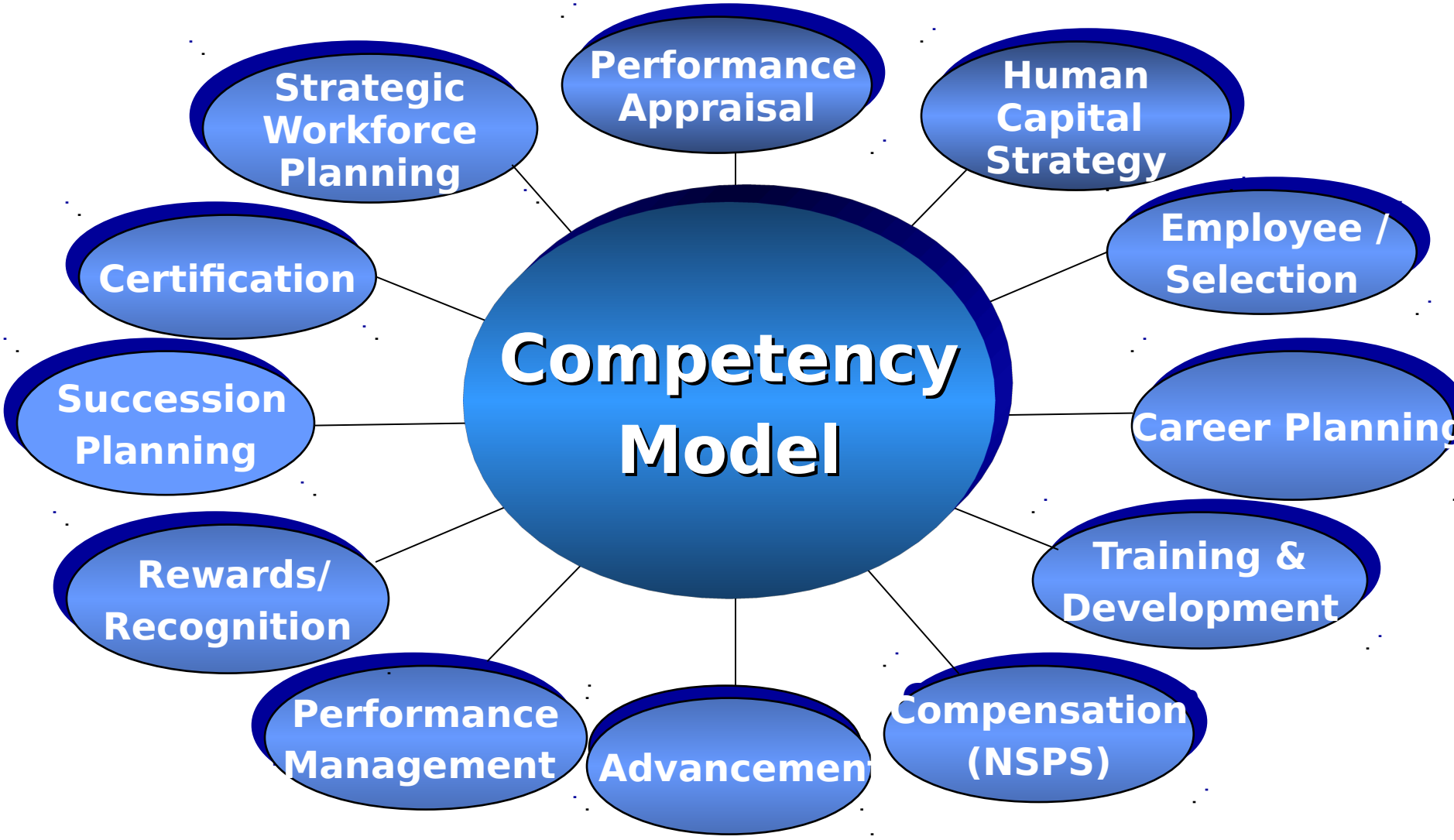
Worker Req.

Core Competency: Dependability
Cross-Functional Competency: Problem Solving
Specialty Competency: Analyzing & Evaluating Information
__Novice __ Functional __ Intermediate __ Advanced _✓_ Expert

Work Req.

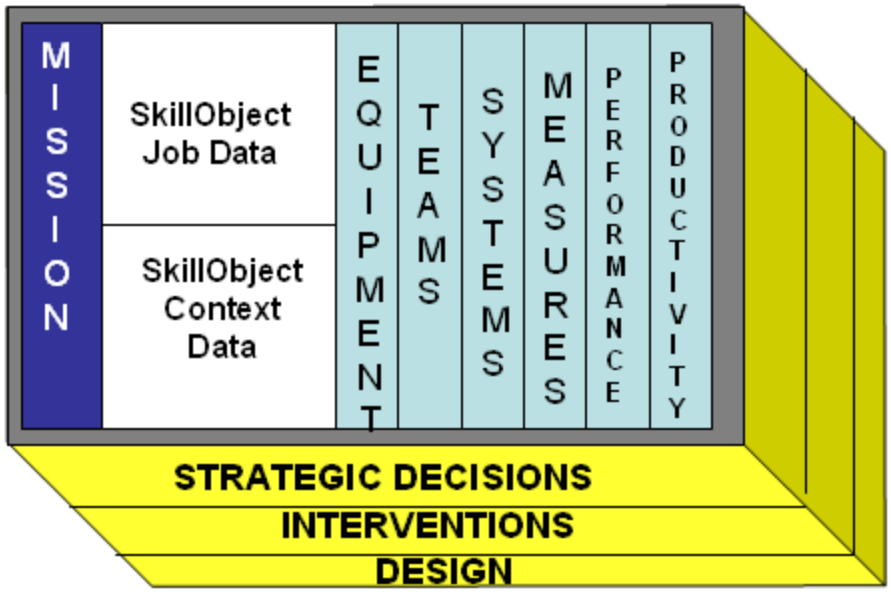
Skill Object: Imagery Management	
Active Task	Identify potential targets on streaming imagery
Standard	98% of objects reported as targets are actual targets
Condition	Underway

Cross-Cutting Utility

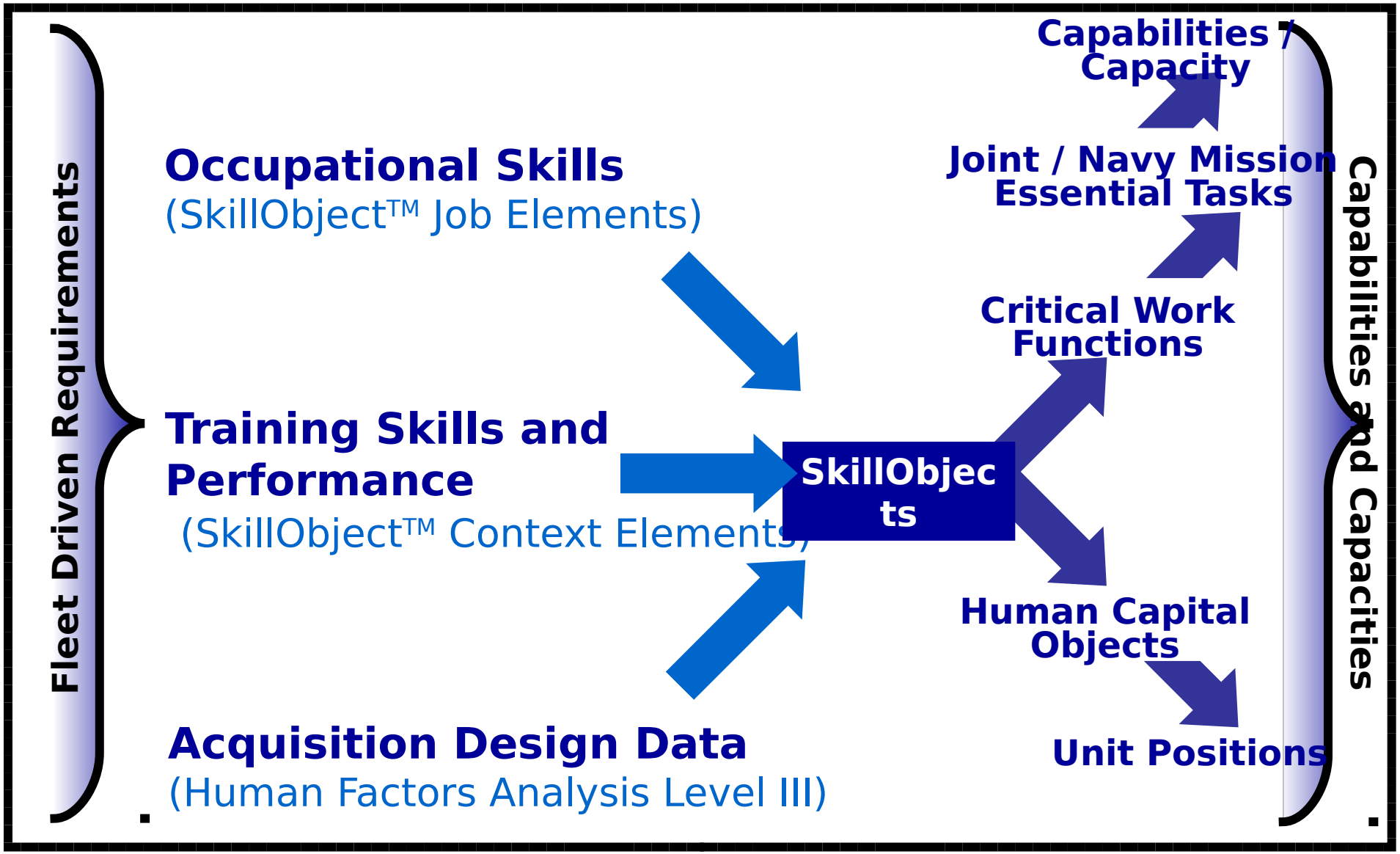


Essential Human Capital Content Elemen

Human Capital Objects



Human Capital Objects

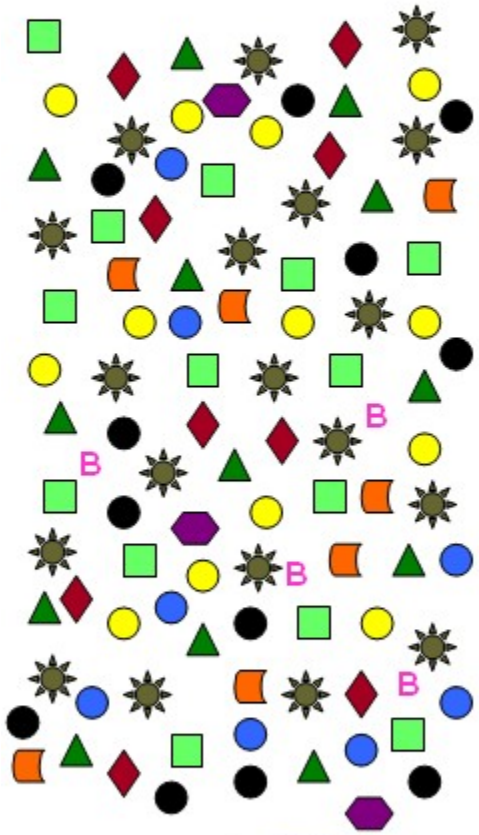


TF 2 Human Capital Content Model

Assets

Work and Work Context Raw Data

"Lowest unit of work element"



Assemble

Skills & Context

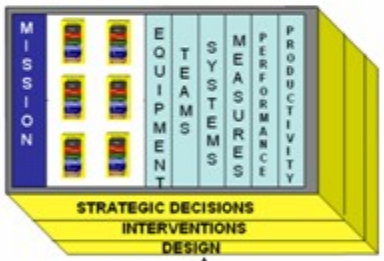
"Lowest unit in context"

Aggregate

Human Capital Object

"Final Specific Work Requirement"

An HCO is an multifaceted collection of work and workplace data content requirements in a specific environment or set of environments, that will be used to support manpower, training and HSI analysis



Assign

- Training
- 5VM
- Position
- WQSB
- Mission
- Manpower
- Acquisition
- Personnel
- Detailing
- Recruiting
- Etc……

Navy Data Environment

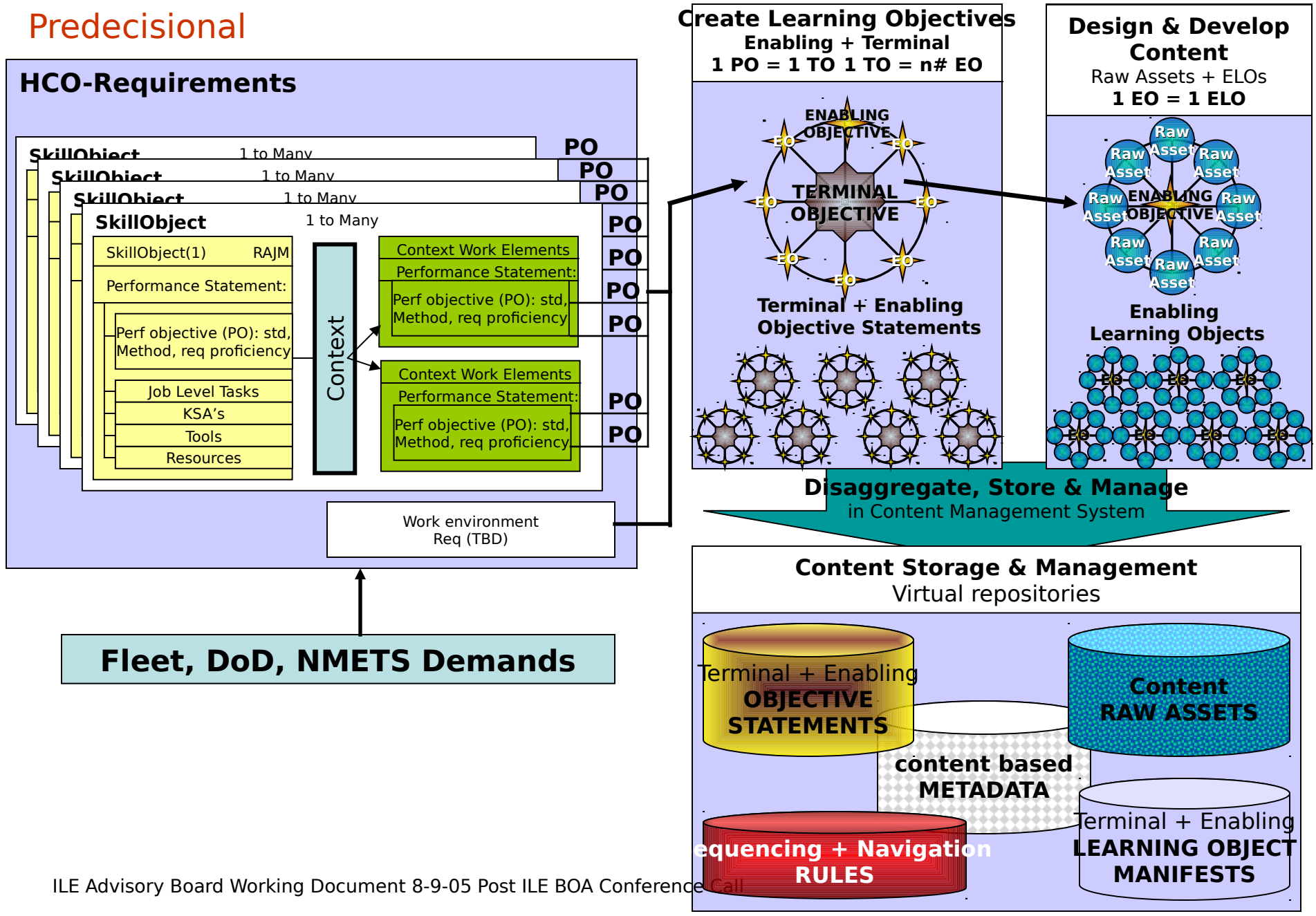
Authoritative Data Sources

Tasks · Knowledge · Resources · B Behaviors
Sub-Task · O*NET Skill · Use Case
Procedural Steps · O*NET Ability · MET's

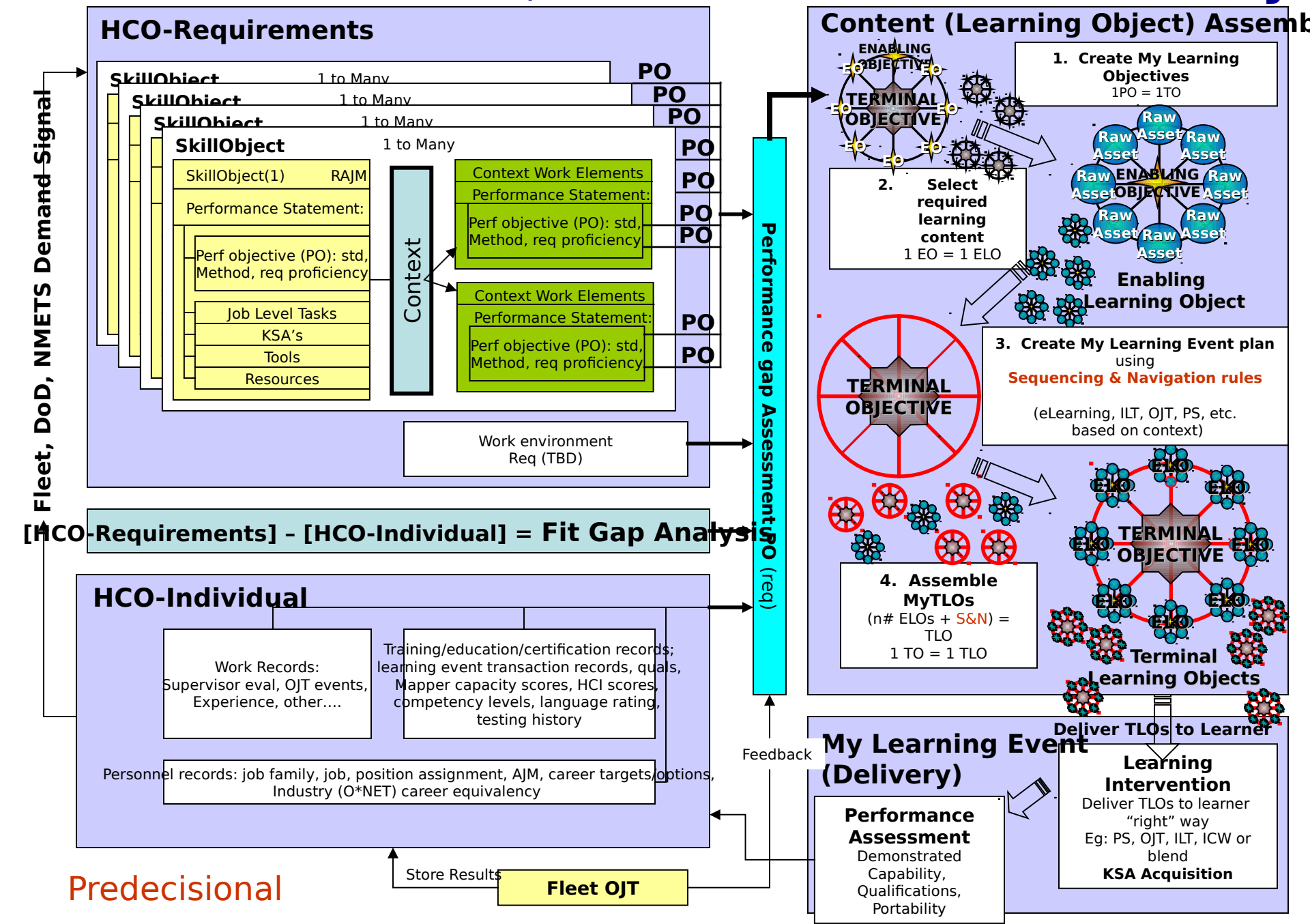
How it all fits in the ILE End-to-End Concept Model

End-to-End Conceptual Model: **Learning Design + D**

Predecisional



End-to-End Conceptual Model: **Content Assembly**

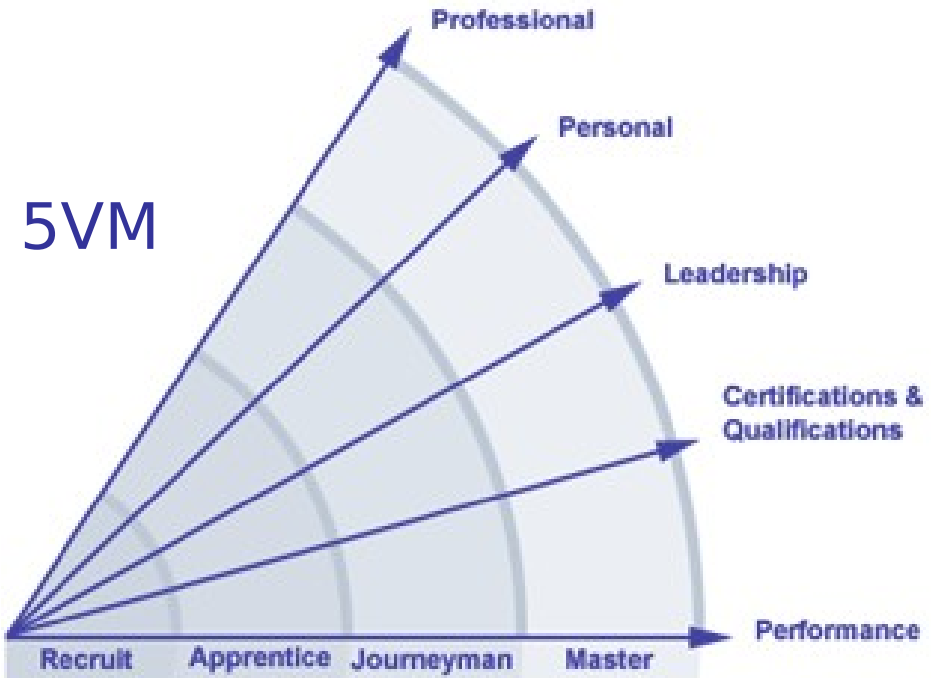


Predecisional

Content, Context, Container, and Career Components Support the 5VM Self Managed Service

Self Managed Opportunities

5VM



What will historians say about TF-HCS contribution to America's Human Capital Economy?

There would not be a world class Human Capital Economy without the vision, dedication and execution quality of well-intentioned Navy Military, Civilians and Contractors.

Conclusion

NSTC with RADM Jones vision and leadership asked the brightest and most capable practioners to attend this inaugural best practices symposium.

Take this opportunity to catch the TF-HCS vision and determine what contribution you can make to its success.

The Human Capital Economy is